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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,960	10/10/2001	Hideo Miura	Q66637	6254

7590 12/30/2003  
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, NW  
Washington, DC 20037-3213

EXAMINER

NGUYEN, PHILLIP

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/972,960

Applicant(s)

MIURA ET AL. 

Examiner

Phillip Nguyen

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

  
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**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, and 6, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Itani et al. ('402).

With respect to claim 1, Itani discloses in Figure 1 the claimed invention with a light wavelength converting module comprising a semiconductor laser 2; a light wavelength converting element 3/6 optically coupled to the laser which converts light entered from the laser; a wavelength plate 10 disposed at the light exiting side of the light wavelength converting element; and a removing portion 5, disposed between the wavelength plate and light wavelength converting element for removing the fundamentally wave from the light incident.

With respect to claim 4, Itani discloses the half-wavelength plate (col. 5, lines 17-20).

With respect to claim 6, Itani discloses the prism 13 which acts as beam splitter.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itani in view of Osawa et al. ('085). Itani discloses the claimed invention except for an IR cutting filter. Osawa discloses in Figure 1 an optical filter which includes IR cutting filter. For the improvement of the wavelength converting module, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide a IR cutting filter to filter out the infrared light or visible light from the laser as taught by Osawa. With respect to claims 3 and 5, it only involves the routine skill in the art to provide a wavelength converting element which joins directly to the laser and placing the wavelength plate orthogonal to the axis of light incident.
5. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itani et al. ('402) in view of Leong et al. ('946).

With respect to claim 7, Itani discloses the claimed invention except for the shield of photodiode and the beam splitter from scattered light. Leong discloses in Figure 2 a shield 120. For the improvement of the laser module, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide a shield for beam splitter and photodiode from scattered light because it only involves the routine skill in the art.

With respect to claims 8-10, Itani discloses the claimed invention except for a light attenuating portion. Leong discloses the claimed invention along with attenuator 112 except for the filter being positioned in between the light converting element and the wavelength plate. For the improvement of the module, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide a light attenuating portion at a light exiting side of the light converting element as taught by Leong to attenuate light.

*Citation of Pertinent References*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Itani et al. discloses Solid State Laser Device for Lithography Light Source and Semiconductor Lithography Method, U.S. Patent No. 5113402

The patent to Leong et al. discloses Multi-wavelength Laser System Probe Station and Laser Cutter System Using the same, U.S. Patent No. 5611946

The patent to Osawa et al. discloses Optical Filter and Optical Device Provided with this Optical Filter, U.S. Patent No. 6327085

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***Communication Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Nguyen whose telephone number is 703-305-4966. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:30 PM


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip, can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are:

TC2800 Official Before-Final RightFAX - (703) 872-9318

TC2800 Official After-Final RightFAX - (703) 872-9319

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0658.

December 23, 2003

  
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